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## **The use of the arts to encourage reflection in the dental professions – a commentary.**

### **Abstract**

Reflective practice is viewed internationally as an important activity within the dental professions and one which the General Dental Council expects to be part of all dental technician programmes in the United Kingdom (UK), irrespective of academic level. Informal discussions with colleagues delivering dental technology in UK higher education institutions agree that reflective practice is an important aspect of the curriculum, and learning is facilitated and assessed using various methods, for example, an online portfolio. Anecdotally, many of the current methods are shown to be ineffective, with up to fifty percent of students not meeting the reflective component. In the dental professions, consideration needs to be given to the use of creative methods to support reflective practice, in order to engage learners and contribute to the development of knowledge, skills and attitudes in this student group.

Reflective practice is not a new concept and has long been viewed as being beneficial to the development of graduates who go on to practice in their chosen professions (1). Reflective capability is linked to desirable qualities such as enhanced self-awareness, life-wide and lifelong learning and becoming a professional (2, 3, 4). However, many approaches to reflective teaching are inconsistent and misunderstood (5, 6). This is problematic as superficial approaches to the teaching of reflection have been linked to superficial levels of reflective thinking in students (7).

Reflective capacity is a formal requirement for registration in the dental professions and evidence of this competence is often provided through student portfolios, developed over the programme of study. However there is little guidance to support educators in understanding reflective ability in students (7). Further, in programmes such as nursing, where the concept of reflection has been embedded for many years, it has been shown that students find reflective practice challenging, particularly in the early years of their programme and many are suffering from reflection overkill (8). Less is known about reflective practice for dental professionals and there appears to be a paucity of research that explores the particular experiences of dental technology students. An informal assessment of the dental technology courses in the UK provided some understanding of the difficulties faced when trying to engage student dental technicians in the undertaking of reflection. Anecdotally it was reported that many students lacked understanding about the meaning and value of reflective practice.

Bearing in mind these difficulties, it remains important that educators endeavor to provide meaningful reflective opportunities for dental technology students. Being accepted as part of the team is important for students in the clinical area who often feel left out of patient care provision and have concerns that their input is being ignored (9). They are often left feeling insecure and this can lead to feelings of stress and anxiety. Reflective activity can support students to explore their feelings associated with incidents from practice and this is particularly important when learning the professional role (7). Not all of the answers to problems in practice can be found through formal learning and having the ability to reflect can help to close the theory/practice gap.

Ways to encourage reflective practice among the dental professions is an international concern and multiple methods have been explored to facilitate effective practice. For example, reflective discussions involving dental students, mentors and practitioners (10), the development of communities of inquiry to support reflection in operative dentistry (11) and electronic journaling to support reflection with student dental hygienists (12). One way to support reflective abilities in other professional programmes has been through the use of the arts. Poetry writing has been shown to be beneficial as a way to critically reflect on practice, for example with medical, social work and sports coaching students (13, 14, 15). Narrative medicine can help develop the imagination, support changes in perspective and reverse burnout in medical clinicians (16). In nurse education, poetry, both published and student-authored, has been used to support students to reflect on their experiences (17). Developing collage has been shown to be helpful in encouraging emotional self-awareness development (18) and painting can support discussion of difficult experiences (19). Film has also been used with success within dentistry and medicine (20).

With this in mind the use of creative reflective methods was discussed with a small cohort of dental technology students at Cardiff Metropolitan University. For the purpose of this commentary we have chosen to present reflection on the use of a poem and cartoon strip. The poem described feelings of anxiety during placement in the laboratory in relation to answering the telephone. The anxiety is underpinned by lack of knowledge about product turnaround times and different items and prices and is stifling the ability to communicate effectively. The second piece, a cartoon strip, explored the experiences of a third year dental technology student, when using an expensive and dangerous piece of machinery in the laboratory. A cartoon style

monster face had been added to a photograph of the machine. Even though students receive training about how to use the machine, it had remained daunting to him.

The creative pieces helped the students to articulate feelings such as the anxiety relating to laboratory work and their thinking was not solely in relation to the technical aspects of their practice. Further, the pieces supported a careful consideration of the issues rather than solely reinforcing a focus on how their practice might change in the future. This is important as it was through this consideration that students were able to use creative reflection to raise and highlight problems, which potentially otherwise would have remained hidden. Decreasing the pressure to change practice supports students in creative thinking rather than reducing the reflective activity to a procedural task. In addition, the students reported an increase in confidence following the creative activity.

A feature of some reflective models is the expectation that through the experience, learning and change will occur. Reflection can be interrogatory, asking the questions, 'What', 'So what', 'Now what?' (21). This approach might feel negative in tone compared to a more positive exploration of what is working well. For example, the concept of appreciative inquiry works on the basis that there are positive aspects to be found in any encounter (22). Adopting such an approach could add a depth to guided models of reflection. Some models suggest the development of an action plan (23). For some students, particularly if they are early in their studies, these expectations might be too difficult to meet. Further, the adoption of such models carries the risk of suggesting that there are clear cut answers to be found through the reflective activities. Often practice reveals the contrary, and what is required is a

mulling over and contemplation of the messy issues raised through reflective thinking. The seminal work of Schon reminds us of the 'swampy lowland' of practice full of situations which are 'confusing "messes" incapable of technical solution' (24). This practical description fits the nature of work based placements well.

Placing emphasis on art or fictitious characters as the focus for discussion, rather than the student themselves, is helpful as it develops a space for critical reflection, without threatening the students' sense of self (25). Rather than solely discussing their feelings, the students in this example were able to relate the reflection to the art work and this was particularly evident in the cartoon strip. The machine was described as 'The Beasty' and was given a cartoon face. This removed some of the fear from the situation and assisted the student in coming to terms with using the machine in practice.

In conclusion, the arts have the potential to effectively engage the dental professions in reflective practice, enabling a creative outlet for exploration. Indeed, without some creative thinking, reflective practice might be at risk of remaining a tick box and incomplete exercise rather than being viewed as a valued way of considering and developing professional practice. Utilising different creative methods might be helpful when considering a way forward for dental technology students and presents opportunities for future research.

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